

Amended Claims Showing Changes Made

0112 Rec'd PCT/PTO 10 SEP 2004

We claim:

1. (Currently Amended) A [[process]] method for treating [[gas,]] water, sediment, or soil containing [[heavy metals]] pollutants by the step of contacting the [[heavy metal]] pollutant containing [[gas,]] water, sediment, fractured rock, or soil with a multi-functional sequestration agent [[selected from the group consisting of]] comprising bauxite [[and modified bauxite]] in its relatively natural form.
2. Cancelled.
3. Cancelled.
4. Cancelled.
5. Cancelled.
6. Cancelled.
7. (Currently Amended) The method according to Claim 1, wherein said multi-functional sequestration agent [[ore]] is formed into a permeable vertical barrier.
8. (Original) The method according to Claim 1, wherein said multi-functional sequestration agent is formed into a permeable horizontal barrier or cap.
9. (Original) The method according to Claim 1, wherein said multi-functional sequestration agent is mixed with the environmental media to be cleaned.
10. (Original) A method for removing or inactivating microorganisms in an emission or in the environment comprising contacting the microorganism with a mineral selected from bauxite, copper ores, and mixtures thereof.
11. (New) The method according to claims 1 or 10 wherein said bauxite is crushed.

12. (New) The method according to claims 1 or 10 wherein said bauxite is granular.
13. (New) The method according to claims 1 or 10 wherein said bauxite is a powder.
14. (New) The method according to claims 1 or 10 wherein said bauxite is installed as a subsurface mineral ore barrier.
15. (New) The method according to claims 1 or 10 wherein said bauxite is in a permeable barrier.
16. (New) The method according to claim 15, wherein said permeable barrier is installed in the path of groundwater flow.
17. (New) The method according to claims 1 or 10 wherein said water is groundwater.
18. (New) The method according to claims 1 or 10 wherein said water is surface water.
19. (New) The method according to claims 1 or 10 wherein said contacting is by mixing said bauxite with said water, sediment, fractured rock, or soil.
20. (New) The method according to claim 1, wherein the pollutant is a heavy metal.
21. (New) A sequester for treating water, sediment, fractured rock, or soil containing heavy metals comprising: bauxite in its relatively natural form mixed with said water, sediment, or soil.

22. (New) The sequester according to claim 21, wherein said bauxite comprises granulated or powdered bauxite.

23. (New) A permeable barrier for preventing migration of pollutants comprising: a multi-functional sequestration agent comprising bauxite in its relatively natural form.

24. (New) The permeable barrier according to claim 23, wherein said bauxite comprises granulated or powdered bauxite.